

The distinctness of this form has been pointed out by Austen (Ann. Mag. N. H., ser. 7, xix, 333), who states that *Echinomyia ludens* Walker, of Brazil, belongs to the same genus.

Named in honor of Mr. E. E. Austen, F. E. S., F. Z. S., of the British Museum of Natural History.

#### **Parapyrellia**, new genus.

Genotype, *Musca violacea* Fabricius, 1805, Syst. Antl., 288. — Wiedemann, 1830, Auss. Zw. Ins. II, 409–410. Brazil.

Differs from *Pyrellia* as follows: Head like *Lucilia*, not like *Promusca* and *Stomoxys*. Facial plate conspicuously longer than broad; cheeks broader, eyes not nearly reaching level of oral margin; face narrower; female front not over two-thirds eye-width; hind crossvein much nearer to small crossvein than to cubitus; no prominent bristle on flexor surface of middle tibia. Differs from *Morellia* as follows: Head more prolonged downward at epistoma; face and parafacials not so wide; ocellars vestigial or weak; abdomen less hairy and bristly; hind crossvein nearer to small crossvein.

### NEW GENERA OF MUSCOID FLIES FROM THE MIDDLE ATLANTIC STATES

By CHARLES H. T. TOWNSEND

The following are descriptions of five new muscoid genera and their genotypes, occurring in the region from New Jersey to Virginia, which are of especial interest on account of their relationships and aberrant characters. To these is added description of the female of *Tachinomyia* Towns.

#### **Eumicrophthalma**, new genus.

Genotype, *Eumicrophthalma shannoni* Townsend, new species.

Differs from *Microphthalma* as follows: Female. Whole form narrowed. Epistoma broader, vertex only a little over one-third head-width. Peristomal profile scarcely bulged. Palpi very short, but slightly hairy. Only two lateral scutellar pairs of macrochætæ. Apical cell closed in border, hind crossvein conspicuously out of line with apical crossvein.

Differs from *Perua* as follows: No ocellar bristles. Epistoma fully as long as the clypeus. Cheeks quite equalling eye-height. Proboscis much shorter, palpi less developed. Front less projected, head much shorter throughout. Antennæ shorter.

***Eumicrophthalma shannoni*, new species.**

Length of body, 6.5 mm.; of wing, 5.5 mm. One female, Eastern Branch, District of Columbia, October 22, 1914 (R. C. Shannon).

Black. Frontalia, first two antennal joints, and most of cheeks and parafacials deep rufous; palpi paler. Parafrontals, mesoscutum, and scutellum cupreous-golden pollinose. Four vittæ on thorax, three others showing behind suture in some lights. Abdomen rather shining, thinly silvery; the pollen dense on narrow bases of last three segments, and in a narrow median vitta. Legs black, tibiæ brownish-rufous. Wings lightly infuscate. Tegulæ whitish.

Holotype, No. 19619, U. S. Nat. Mus.

Named in honor of Mr. Raymond C. Shannon.

***Elephantocera*, new genus.**

Genotype, *Elephantocera greeni* Townsend, new species.

Differs from *Calpodomyia* as follows: Male. Front prominently produced in profile; eyes large but not descending as low as vibrissæ; cheeks very short but of good width, nearly twice as wide as length of second antennal joint. Front almost equilateral, vertex but little less than eye-width; face considerably widened, much wider below than one eye; facial carina broadened and rounded, not conspicuous below; oral margin broad, subarcuate, about even with vibrissal insertion. Third antennal joint greatly enlarged, much broadened, rather thick-phylliform, suggestive of that of *Phytomyptera*, reaching about as low as lower border of eyes, the broadening effected by a prolongation of lower edge, about one and one-half times as long as wide, oblong-rounded, straight on upper edge, evenly rounded apically and on lower edge. Arista much longer than third antennal joint, thickened on about basal half. Frontalia narrower anteriorly than one parafrontal, widening posteriorly. Facial profile not bulged, quite strongly receding, vibrissal axis

of head only one-half of antennal axis. Ocellar area very restricted, ocellars quite strong. No proclinate fronto-orbitals. Frontals descending below base of third antennal joint. Facialia with bristles about one-third way up. Very weak discal pair of scutellars, and a hairlike nondecussate short apical pair. Abdominal macrochætæ discal and marginal on last three segments, a median marginal pair on first segment. Legs longer, claws short. Apical cell open, ending immediately before exact wingtip; cubitus subangular, somewhat rounded; third vein bristled halfway to small crossvein. Costal spine small, but distinct. At once distinguished from *Phytomyptera* by the large eyes and small cheeks. The genus is related to *Oxynops*.

**Elephantocera greenei**, new species.

Length of body, 3 mm.; of wing, about 3 mm. One male. Wenonah, New Jersey, October 2, 1910 (C. T. Greene).

Shining brownish-black. Antennæ, frontalia, and palpi dark brown or blackish; face, cheeks, and parafrontals lightly silvery, the rest of mesoscutum and scutellum more shining but still with thin bloom in certain lights. Abdomen very shining, with faint bloom in oblique light. Legs dark brown or blackish. Wings clear. Tegulæ watery-whitish.

Holotype, No. 19612, U. S. Nat. Mus. Labeled "*Hypostena magnicornis* Coq." in Coquillett's hand but evidently never published.

Named in honor of Mr. Charles T. Greene.

**Hypertrophomma**, new genus.

Genotype, *Hypertrophomma opaca* Townsend, new species.

Female. Form short and broad. At once distinguished from all other muscoid genera known to me by the combination of hypertrophied eyes and almost naked pollinialike palpi, the latter character being shared by *Lispidea*. Head much broader than high, nearly half again as broad as height, its profile subsemicircular, the vibrissal axis little over one-half the antennal axis. Front and face absolutely equal in width throughout, the vibrissæ inserted at extreme edge of the cut-off epistoma, the eyes extending exactly from vertex to vibrissal angles, and the antennæ inserted just halfway between these two points.

The eyes each show in front view almost as great width as the front and face, these being nearly as wide as one-half their combined height; the wide eyes, of the full height of the head, separated by the wide front and face, give a striking effect of hypertrophied eye-surface when viewed from in front, which is not shared by any other known muscoid form even though it may possess proportionately to its size as great ocular area. Facial plate deeply sunken, broad below, subtriangular, facialia bare; parafacials bare, very narrowed below. One strong decussate pair of frontals about even with base of antennæ, a weak bristle above and below it; two proclinate and three reclinate fronto-orbitals, outer vertical only a little shorter than inner one, strong pair of divaricate-proclinate ocellars. Frontalia not as wide as parafrontals. Second antennal joint short, third joint reaching exactly to oral margin; arista thickened slightly on less than basal half, basal joints very short. Proboscis very short and fleshy; mouth subatrophied, the oral opening apparently non-functional; palpi about as long as the proboscis, greatly enlarged on distal two-thirds, bowed, fat, swollen, smooth, pollinialike, their surface practically absolutely bare even of microscopic hairs (only one or two were unmistakably made out with great difficulty). Cheeks extremely narrow, same width as lower end of parafacials. Abdomen vaulted, short-ovate, first segment without median marginal macrochætæ, second with a median marginal pair and a lateral marginal pair, third and fourth segments with marginal row. Tarsi very short, the metatarsi about as long as the other joints combined. Hind tibiæ very loosely subpectinate. Third vein bristled to small crossvein. Costal spine vestigial. Apical cell open, ending very distinctly before wingtip. Cubitus rounded, without wrinkle or stump. Hind crossvein straight, nearer to cubitus, at an angle of about 45 degrees to hind margin of wing. Small crossvein opposite end of auxiliary vein. *Houghia* approaches this genus in a number of characters.

***Hypertrophomma opaca*, new species.**

Length of body, 4.75 mm.; of wing, 3.75 mm. One female, Iona, New Jersey, October 2, 1910.

Ground color of head and abdomen pale rufous. Face silvery, same bloom apparent on frontalia. Parafrontals ashy-golden. Antennæ black, base rufous. Palpi light fulvous. Thorax, scutellum, and abdomen obscure ashy-golden; two narrow median thoracic vittæ, two heavier interrupted outer ones; scutellum pale testaceous on border. First abdominal segment blackish above except on sides; rest of tergum evenly pollinose, with a dot for each hair; venter wholly light rufous. Legs blackish, but femora and tibiæ with a distinct rufous tinge. Wings clear. Tegulæ yellowish-white, the borders more yellowish.

Holotype, No. 19567, U. S. Nat. Mus. This specimen bears label "*Hypostena opaca* Coq." in Coquillett's hand, but so far as I can find no description of it was published by him.

#### **Metavoria**, new genus.

Genotype, *Metavoria orientalis* Townsend, new species.

Differs from *Metaplagia* as follows: Clypeus much shorter, broadened below; epistoma broader, well prolonged below the vibrissal angles, the vibrissæ set well above oral margin. Third antennal joint of male about two and one-half times the rather elongate second joint, that of female hardly or about twice second. Arista not thickened to tip, tapered on apical third, second joint not elongate. Palpi well developed. Eyes descending nearly to vibrissæ in male, not so low in female. Male front at vertex not over one-third head-width, that of female wider. Hind and apical crossveins not nearly in line, the former about in middle between cubitus and small crossvein, cubitus a little nearer to hind than to front margin of wing, hind crossvein nearly in middle between the two margins.

#### **Metavoria orientalis**, new species.

Length of body, 8 to 8.5 mm.; of wing, 5 to 5.5 mm. Two females, Arlington, Virginia, taken in flytrap, June 7, 1914 (Bureau of Entomology; R. H. Hutchison, coll.), and Kansas City, Missouri, June 19; one male, Baton Rouge, Louisiana (H. A. Morgan, labeled "Expt. 18, sub. 5").

Black, silvery pollinose. Head wholly silvery, including occiput and in one female the frontalia; palpi and first two anten-

nal joints rufous, third antennal joint and arista black, frontalia brownish-rufous to brown. Thorax and scutellum silvery; four thoracic vittæ, the inner pair linear. Abdomen silvery on last three segments except broad hind borders, the anal segment being rather more than half black. Legs black. Wings clear, bases narrowly tawny. Tegulæ white. The pollen of thorax and abdomen has a bluish tint, sometimes shared by that of head.

Holotype, No. 19618, U. S. Nat. Mus., female, Arlington, Virginia. Allotype, male.

### **Torynotachina**, new genus.

Genotype, *Torynotachina quinteri* Townsend, new species.

Runs to Coquillett's *Hypostena barbata*. Differs from *Methypostena* as follows: Female. Facial profile about as long as frontal. Antennæ inserted well above eye-middle. Third antennal joint long, three and one-half times second or about that. Facialia ciliate fully half way up. Ocellars very small, short, weak, vestigial, a still shorter pair behind them. Three reclinate inner orbitals, two proclinate outer; outer vertical well developed. Front at vertex over one-fourth head-width. Arista thickened almost halfway, second joint round and distinct. Frontals descending about to end of second antennal joint. Head length at vibrissæ fully four-fifths that at base of antennæ. Hindmost postsutural stronger, nearly as strong as the middle supraalar and hind postalar. Two anterior marginal scutellar bristles stronger, discal abdominal bristles much stronger. Apical crossvein not markedly bent in. Apical cell narrowly open, ending just before wingtip. Hind crossvein slightly nearer to apical than to small crossvein. Ovipositor chitinous, about as broad as long, rather spoon-shaped.

### **Torynotachina quinteri**, new species.

Length of body, 4.5 to 5.5 mm.; of wing, 3.75 to 4 mm. Two females, Cabin John Bridge, Maryland, June 7, 1915, on herbage (G. E. Quinter).

Black, shining, silvery-pollinose. Frontalia black. Parafrontals and all of face silvery-white, changing to dark with light incidence. Cheek grooves dark. Occipito-orbits silvery-



white. Presutural mesoscutum silvery-white, with two heavy median vittæ and two heavier outer ones, all confluent anteriorly, forming a marking with arcuate front border and indented behind with the silvery-white. Rest of mesoscutum showing some silvery behind, but mostly shining. Scutellum shining black, not pollinose. Abdomen shining black, with silvery-white pollen showing narrowly on bases of second to fourth segments, broadening laterally. Legs, antennæ, and palpi black. Wings clear. Tegulæ tawny-whitish.

Holotype, No. 19573, U. S. Nat. Mus., TD4466.

Named in honor of Mr. George E. Quinter.

**Tachinomyia** Townsend, 1892, Trans. Am. Ent. Soc., xix, 96-97.

Genotype, *Tachinomyia robusta* Townsend, l. c.

Only the male was described. The female differs from female of *Macromeigenia* as follows: More robust in form, the head, thorax, and abdomen widened and of equal width. Frontal profile straight. Parafacial profile not so bulged, nearly straight. Facialia evenly diverging inferiorly, the clypeus subtriangular. Epistoma produced. Facialia sparsely ciliate halfway up. Vibrissæ situated not as far from oral margin as length of second antennal joint. Antennæ broader; second joint elongate, third about one and three-fifths times as long as second. Palpi heavy from base to tip. Front at vertex over one-third head-width. Cheeks about two-fifths eye-height. Parafacials bare. Eyes with short, sparse hairs. Parafacials very broad, of equal width, but only one-half as broad as lower part of facial depression. Four heavy lateral macrochætæ on scutellum. Strong but short median marginal pair of macrochætæ on first abdominal segment, stronger pair on second, no discal on first three segments, marginal row of ten on third; anterior discal row of eight or ten on anal segment, which is cleft behind on median line, the entire edge armed with closely-set short spines. Costal spine developed.

**Tachinomyia floridensis** Townsend, l. c.

Length of body, 12.5 to 14 mm.; of wing, 11 to 12 mm. Two females, Washington, District of Columbia (A. A. Doo-

little), and Chevy Chase, Maryland, May 25, 1915, TD4456 (G. E. Quinter); male and female in copula, Cropley, Maryland, May 1, 1904 (F. Knab); and one male, St. Louis, Missouri, May 1, 1904 (W. V. Warner).

Female. Whole head silvery burnished, with faint shade of golden, especially noticeable on parafrontals. Frontalia brown, but covered with the golden pollen. Antennæ rufous, third joint largely blackish. Palpi fulvorufous. Beard brassy-gray. Thorax and scutellum pollinose, two narrow vittæ and two wider outer ones; scutellum rufotestaceous apically. Abdomen thinly silvery above except the very densely pollinose narrow bases of second and third segments and whole of fourth. Venter thinly pollinose. In oblique lights the thin pollen appears thicker. Legs black, femora silvery on outside. Wings clear, tegulæ tawny-white.

## TWO NEW CRANE-FLIES FROM PORTO RICO<sup>1</sup>

(*Tipulidæ*, *Diptera*)

By CHARLES P. ALEXANDER, Ithaca, N. Y.

The following insects are included in the collection of the United States National Museum and were kindly handed to me for identification by Mr. Frederick Knab, the custodian of the Diptera. These new forms may be characterized as follows:

### ***Eriocera ocellifera***, new species.

Antennæ pale; head dark; body orange, the tip of the abdomen black; wings light yellow with a rather sparse brown pattern including an ocellate mark having the origin of the radial sector as its center.

Male. Length, 10.5 mm.; wing, 9.8 mm.

Rostrum and palpi light brown, the latter a little more yellowish. Antennæ short, the scapal segments dark brown, the first flagellar segment pale dull yellow, a little darker at the

<sup>1</sup>Contribution from the Entomological Laboratory of Cornell University.